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ABSTRACT

The purpose of this paper is to determine the current status of the Taunton Public School's (Massachusetts) kindergarten to grade eight library program in terms of networking and resource sharing. It uses Diane Kester's model of the three stages of library networking in four key areas--human support, financial support, technological support, and activities and applications--that need to be addressed during each stage. A strategic plan was designed to incorporate various networking strategies and resource sharing options for the K-8 library media centers. Implementation of such a plan will lead to a district-wide networked library system with future options of linking up with multitype libraries. To provide students and educators with a more equitable and improved access to resources, the following systemwide goals for the K-8 school library media centers (SLMCs) were identified: (1) to automate all of the K-8 SLMCs with networking capabilities so that students will have access to all materials; (2) to ensure increased access to CD-ROM resources and other new technologies in both a networked and stand-alone format; and (3) to provide access to the Internet so that students become knowledgeable concerning telecommunications. Appendices include fact sheet plans; goals and initiatives; current assessment of the technology plan; a memorandum of South of Boston Libraries; and a scholarship letter from TCI Cablevision. (Contains 17 references.) (AEF)

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THE DEVELOPMENT OF A STRATEGIC PLAN FOR NETWORKING THE KINDERGARTEN TO GRADE EIGHT SCHOOL LIBRARY MEDIA CENTERS IN THE TAUNTON SCHOOL SYSTEM

by
Carol Schene

A Leadership Project Presented to Bridgewater State College in Partial Fulfillment of the Requirements of the Certificate of Advanced Graduate Study in Educational Leadership

March 1996

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TABLE OF CONTENTS

PAGE

INTRODUCTION.....1

BACKGROUND AND SIGNIFICANCE.....5

REVIEW OF THE LITERATURE.....16

PROJECT DESIGN.....40

RESULTS.....49

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS.....56

REFERENCES.....62

APPENDICES

APPENDIX A Fact Sheet: MBLC 1995-96 Legislation.....64

APPENDIX B Two Year (1996-97) Goals.....66

APPENDIX C Technology Plan - Current Assessment.....67

APPENDIX D Fact Sheet: MBLC Plan and School Libraries.....70

APPENDIX E Technology Plan -- Goals and Initiatives.....72

APPENDIX F Memorandum: South of Boston Libraries.....75

APPENDIX G Scholarship letter from TCI Cablevision.....78

APPENDIX H Fact Sheet Plan and City and Town Libraries.....79

CHAPTER 1

Introduction

Technological advancements have provided libraries with new opportunities for information access and resource sharing through networking. Participation in these networks requires careful, long-range planning, adequate funding, and effective communication among the various libraries.

In 1977, a Task Force was appointed by the National Commission on Libraries and Information Science to examine the role of school library media programs in national networking. In its report, the Task Force recommended that school library media centers should be full participants in a national multitype library network. The Task Force cited the benefits to students who would have access to more resources to meet their informational needs as well as the benefits to other types of libraries whose users would be able to share the specialized resources of school library media collections.

Even before the issuance of this report, many states had begun to develop statewide networks that have included school library media centers. For example, Illinois, Washington and Colorado,

invited school library media centers to join their statewide networks in 1975 (Sive, 1982). Advancements in library automation and the long tradition of interlibrary loan, have facilitated the development of these networks in many states.

The Massachusetts Board of Library Commissioners issued A Strategic Plan for the Future of Library Services in Massachusetts (1993). This report supported the concept of multitype library networking. It also acknowledged the need for state support of such a project and the fact that many of the school libraries in Massachusetts are among the most poorly supported in the United States. A copy of this plan was sent to school systems throughout the state. As a follow up in May 1995, informational meetings were held to update librarians on the progress of this plan. Librarians in southeastern Massachusetts have been invited to participate in the formation and organization of a new region. The South of Boston Libraries (SOBL) group, which is composed of librarians representing public, school, academic, and special libraries, is now meeting on a regular basis to propose ways of developing a multitype library network for southeastern Massachusetts.

In order to participate in any of these new resource sharing projects that involve multitype libraries, school library media personnel need to develop strategic plans for automating their

library media centers. They must also gather support for the concept of resource sharing as opposed to the present situation of isolated, self-contained, standalone library media centers in each school with no telecommunications capabilities. A lack of planning, funding, and communications in school library media centers has prevented them from networking within the school library media center; with other school library media centers within their school system; with other school library media centers in other school districts; and/or with other types of libraries (public, academic, or special).

The purpose of this leadership project is to determine the current status of the Taunton Public Schools' kindergarten to grade eight library program in terms of networking and resource sharing using Diane Kester's model of the three stages of library networking along with the four key areas -- human support, financial support, technological support, and activities and applications -- that need to be addressed during each stage (1992). A strategic plan will then be designed that will incorporate various networking strategies and resource sharing options for the K - 8 library media centers that will lead to a district-wide networked library system with future options of linking up with multitype libraries.

Definition of Terms

For the purposes of this project, *formal networking* and *informal networking* are defined as follows:

Formal networking is "a formal arrangement whereby materials, information and services provided by a variety of types of libraries and/or other organizations are made available to all potential users." (NCLIS, 1978)

Informal networking involves non-binding cooperation among libraries. It often prepares the way for more formal arrangements.

CHAPTER II

Background and Significance

In its Strategic Plan for the Future of Library Services (1993), the Massachusetts Board of Library Commissioners defined the role of libraries in the following terms:

> Libraries have played a key role in Massachusetts' cultural and economic development for more than three hundred years. Libraries serve as a focus for intellectual growth, research and learning for people of all ages. Through libraries, cities and towns, schools, institutions and businesses provide collective access to books and other resources which no individual could hope to afford. (MBLC, p.3)

Although access to the collection of a single library at one time met the needs of many users, this is no longer the case. With the explosion of information that has taken place, the ability of any standalone library to continually and consistently meet the needs of users has become increasingly difficult. Advances in technology are providing libraries with new ways of meeting users' needs through networking and resource sharing. The MBLC plan highlighted several significant issues that need to be addressed so that all types of libraries can be included in networking and sharing resources in order to meet the expanding demands for access to information. These issues include greater cooperation among different types of

libraries, state support to create a statewide network - an electronic information highway, more equitable access to information, and opportunities for training and assistance in learning how to use these new technologies.

Fifteen years earlier before the release of the MBLC report, the National Commission for Libraries and Information Services (1978) had published its landmark paper that supported the inclusion of school library media centers as part of a nationwide, multitype, resource sharing library network. As was stated in its rationale,

> ...the information needs of young citizens are important. The quality of the information services to which students and their teachers have access affects directly what they learn and how well they learn it --a factor of no little consequence for this Nation's future. (NCLIS, p.5)

However, in spite of its strong support and recommendations about the inclusion of school library media centers in multitype networking, its role was visionary and advisory.

It was at the state level that the actual planning and implementation of multitype networking began to occur. Information on school library participation in networking at the state level has been available since the early 1980s. Focusing on fourteen statewide networks that included school libraries, a 1982 report (Sive) emphasized the fact that students and teachers have information needs that require resources beyond the scope of a

standalone library. Access Pennsylvania, a statewide network begun in 1984 (Epler & Tuzinski, 1991), exemplified this type of access through a formal statewide network. As of 1991, there were 427 school libraries and 211 other types of libraries in the project which gave students access to 13.7 million holdings. Another formal network was created in Hawaii. Known as the Hawaii School Library Network Project, it developed a union catalog that served as the foundation for resource sharing among 200 public schools (Nakamura, 1991). Future plans included adding the statewide school library union catalog to the statewide network that already had access to the OPAC (online public access catalog) of the public library system and the University of Hawaii's main library.

In contrast to other states in which multitype, statewide networking is already a reality, the MBLC's strategic plan in Massachusetts has not yet been implemented. However, legislation entitled "An Act Implementing the Strategic Plan To Enhance Library Technology and Resource Sharing In the Commonwealth" (H4381) was filed on Beacon Hill in 1995. One of the goals of this legislation is,

> to expand the present Regional Public Library Systems to include membership from academic, school and special libraries in the Commonwealth. This will provide users of all types of libraries with expanded access to books and other library materials available within each region, regional reference and delivery

services and their cooperative services designed to strengthen local libraries. (see Appendix A)

This legislation has not yet been passed. Nevertheless, the MBLC held regional, informational meetings about the implications of the Plan in the spring of 1995. This was followed by invitations to representatives of various types of libraries to join the SOBL (South of Boston Libraries) planning committee whose meetings have continued throughout 1995.

Although statewide networking is an exciting and important long-range option for school library media centers to consider and make preparations, there are other networking and resource sharing plans that can be developed and implemented in the more immediate future that can improve access to information at the district and local levels. For example, in Virginia, a telecommunications network linked sixteen rural media centers in the twelve southside counties to an academic online public access catalog (Church, 1991). This system gave students access to over 700,000 volumes included in the database of the Lancaster Library at Longwood College. A survey about this access was given to English teachers and media specialists at the participating schools. Results indicated that the attitudes of the teachers concerning the adequacy of the school library media center services in terms of accessing information

improved due to networking.

The above mentioned network involved multitype libraries in several counties. At the district level, a network might involve linking only school library media centers. This was the plan that was developed in the West Windsor-Plainsboro Middle School in New Jersey, where library automation and the development of a local area network (LAN) within the school eventually developed into a wide area network (WAN) with the capabilities of linking this school with the six other schools in the district (Manczuk & Pasco, 1994). At the Brunswick Senior High School in Lawrenceville, Virginia, where 75% of the student population was considered at risk, a CD-ROM network was installed throughout the entire school to improve the learning environment. Three years after this infusion of technology into the school, standardized test scores rose an average of five points, and the preference of the students to use the networked, computerized resources was also noted (Cheely, 1993).

To implement any of these types of networks, a clear understanding of the need for this access to information and a commitment to designing a plan that will facilitate this access must be developed. In her 1992 study, Diane Kester designed a "model of the stages of school system participation in library networks...with major activities at each stage identified."(p.3)

She identified four key areas that needed to be addressed. They were technological support, financial support, human support and activities and applications. She also acknowledged that the phases would vary depending on the commitment of individual school systems to each stage in each key area. This model will be used to help configure the networking and resource sharing strategies to be recommended for the kindergarten to grade eight school library media centers in the Taunton Public Schools.

During the 1994-95 and continuing into the 1995-96 school year, the Taunton Public School system began to formulate its systemwide technology plan in which the school library media center will play an important role in providing access to new technologies for all of the students. At the present time, the K - 8 library media centers have quality, up-to-date print collections providing a print-rich environment, but a limited technological environment. The dilemma is to gain support for adequate funding to improve access to new technologies without diverting funds from the print collections which would lead to their deterioration (Miller & Shontz, 1994; Van Orden & Wilkes, 1993). Adequate funding for networking and resource sharing throughout the system will ensure an equitable approach to accessing information avoiding the problem of creating a "have" and "have-not" scenario that is an issue

addressed in studies that have examined the advantages of accessing information using the new technologies (Mendrinos, 1992).

Although a union catalog on CD-ROM is available in three middle schools and one K-8 school, none of the K-8 library media centers can be considered a high-tech library media center according to Miller and Shontz (1994) since it would be necessary to have both an online public access catalog and an automated circulation system installed. Only one of the K-4 elementary school library media centers has a telephone. Lack of a telephone has been cited by several studies as an obvious impediment to opening up communication channels for networking and resource sharing among librarians (Sive, 1982; Epler, 1988; Kester, 1992; Miller & Shontz, 1994). Standalone computers give students access to resources on CD-ROM , such as magazines and newspapers through *Infotrac*, electronic encyclopedias and atlases. There is also cable hook-up to the program, *Ingenius*, from the TCI Cable Company. However, the extent of this access varies from school to school with some students having more enriching experiences in terms of accessing information through new technologies than others. By developing a systemwide plan for networking and resource sharing, these inequities can be addressed. Through networking, sharing resources will become a much more realizable goal.

Options for networking that need to be considered include:

* Networking by installing dedicated phone lines with modems to provide access to the Internet and other telecommunications capabilities such as fax machines as was exemplified in Hillsborough County, Florida where needed materials were faxed between the schools as part of a cooperative collection approach (Aaron, 1990).

* Networking with other types of libraries (public, academic, special) within the southeastern Massachusetts area. This might involve requesting membership in the local public library network so that each school library media center would have access to the library collections within a designated area.

* Networking among the school library media centers within the school system. This would include developing an automated union catalog and circulation system that would give students access to materials available throughout the school system.

* Networking within each school. Two options that might be considered are:

  A *backbone network* that wires the entire building for technology creating an information-rich environment in which information is immediately accessible through technology, no matter where the students are in the

building.

A *local area network* (LAN) connecting personal computers that are housed in the library media center.

All of these options need to be studied and evaluated. A long-range plan then needs to be formulated concerning the sequence in which those options that are selected might be implemented.

In order to develop a plan for resource sharing and networking, it is also necessary to define and design a new image of the library media center. The perception of the library media center as a storage and retrieval place for books needs to be replaced. Instead, the library media center needs to be perceived by administrators, teachers and students as a major learning environment - an intellectual and instructional hub of the school that lends itself to team-teaching, research, communication, and integrated learning as well as other learning activities. Equally important rather than seeing each media center as a self-contained, isolated site at each school, the library media centers need to be viewed as comprehensive, cooperative resources within the system as a whole. Access to these new technologies will change learning and instruction. It will provide the potential to empower teachers to

become information specialists in each school and will encourage library media center staff to become collaborative partners with teachers by facilitating the flow of information and providing linkage across the curriculum. This human networking complemented by technological networking will empower each school to provide students with greater access to information. By implementing a resource sharing plan among all of these schools, each school will be able to go beyond the resources available in a single library media center and tap into the resources of the other media centers, as well as the wealth of information available through other types of libraries and through telecommunications networks.

For the Taunton Public School System, the greatest benefit from networking will be the fact that it will be able to increase access to resources needed by students, teachers and administrators. Studies by Bard (1993), Cheely (1993), Van Orden & Wilkes (1993), and Mendrinos (October,1992) emphasized that students prefer using computerized resources. Furthermore, students need access to information using various formats to prepare them for the future (Epler, 1991; Manczuk & Pasco, 1994). Developing a strategic plan for networking and resource sharing in the school library media centers in the Taunton Public Schools will help to ensure that our

students will have access to information beyond the school house walls creating an enriched learning environment for all students.

CHAPTER III

Review of the Literature

The development of library networks on a national, state and local level by using electronic connections has been an ongoing process since the development of MARC (MAchine Readable Cataloging) records at the Library of Congress. In 1978, the National Commission on Libraries and Information Science (NCLIS) released its seminal report entitled The Role of the School Library Media Program in Networking. It defined formal networking as "a formal arrangement whereby materials, information, and services provided by a variety of types of libraries and/or other organizations are made available to all potential users" (1978, p.6). It presented a rationale for including school library media centers in these networks. Five principles that needed to be adhered to in order to participate in networking were pointed out. They were:

(1) Every individual is entitled to equal opportunity of access to information to meet his/her needs.

(2) Libraries need strong individual collections so that quality networks can be developed.

(3) Networking is not free.

(4) There must be equitable representation of all of the libraries on the governing board of the network.

(5) It is essential that members effectively communicate. (p.35)

Besides these guidelines, it was noted that it was also necessary to

address the psychological, political and legal, funding, communication, and planning factors that influenced networking. The NCLIS Task Force which was responsible for this study developed immediate, intermediate and long-range recommendations to address these concerns. It advocated for the full participation by library media centers so that the students in elementary and secondary schools would not be discriminated against in access to information. The report concluded that, by participating fully in library networks, schools would have access to a greater variety of resources, and other types of libraries would be able to access the schools' specialized collections for the benefit of all citizens.

In her comprehensive study, Sive (1982) presented an overview of the development of formal library networking throughout the United States since the publication of the NCLIS report (1978) with an emphasis on those networks that had included school library media centers. She focused on the status of school library participation in the networking process. Reporting on statewide networks in fourteen states, she concluded that there was a lack of published information about school libraries and networking in these states; and that even when there was published information, the data available lacked completeness and/or comparability to definitively identify the benefits of school library networking. Some of the areas in which data needed to be collected in order to be better able to evaluate the effectiveness of school library

networking included: determining the number of schools participating in resource sharing, the number of interlibrary loan transactions, the sources of funding, the cost of resource sharing, the number of school libraries with/without telephones, the scope and availability of union catalogs and other tools for locating information, the delivery systems for interlibrary loans (ILLs), and public access to school libraries. There was also a lack of research on the information needs of the clientele that was served by the school library media centers. In spite of the limited data available, Sive formulated some tentative conclusions from her study of formal library networking involving schools. They included:

* the sense of professional isolation decreased when librarians became involved in networking
* a network environment offered support to nonprofessionals who staff libraries.
* the benefits of networking had to be weighed against the cost.
* to gain greater support from the public for networking school libraries, the public needed to have access to school library collections.
* School libraries have specialized resources that were of value to other types of libraries.
* Information needs of students and teachers often went beyond the resources of an individual school library requiring quick and efficient access to services and materials of other libraries.
* the lack of communication between school and public libraries has impeded even informal networking between these two types of libraries.

* the lack of telephones in many libraries stood in the way of plans for effective networking.
* Cooperative collection development needed to be considered when entering into networking agreements.

In contrast to the states studied by Sive, Massachusetts has no statewide network. In 1993, the Massachusetts Board of Library Commissioners (1993, July) released its plan for library services and networking in Massachusetts. The strategic planning committee that was formed to develop this plan included school library media specialists as well as academic, public and special librarians. The plan focused on a number of broad objectives and goals for library services in Massachusetts, but did not address how these goals will be implemented in terms of such issues as funding and technological support. The report identified the following important trends facing libraries in Massachusetts: (1) globalization, specifically the need for timely access to global information services; (2) the information explosion that challenges libraries in terms of acquiring, organizing and making this increased amount of recorded information accessible; (3) a new world of electronic access to information that potentially could create a society of "haves" and "have nots" if access to this type of information is limited to those who can afford it and understand how to access it because they are information literate; (4) an increased need for lifelong learning because

of the continual technological changes.

According to this report, only one tenth of all of the 2,800 academic, public, school, institutional, and corporate libraries in Massachusetts are involved in automated resource sharing networks. "What is needed is a statewide structure to effectively link existing programs and extend the benefits of regionalization, cooperation, and networking to all libraries" (MBLC, p. 5). The report acknowledged that state support is needed to accomplish this goal and the fact that "state-supported programs for cooperation and networking among different types of libraries are currently in place in almost every other state, and are particularly well developed in states with technology-oriented economies" (MBLC, p.6). It further noted that many of the school libraries in Massachusetts are among the most poorly supported in the United States. This plan recognized that electronic information, if made available on a statewide basis, could be done at a relatively low cost. Presently, only 250 of the approximately 2,800 libraries in Massachusetts have state supported telecommunications linkages. The MBLC concluded that a statewide network linking all libraries to national and regional networks is vital to provide Massachusetts citizens of all ages with essential electronic resources.

Van Orden and Wilkes (1993) did a descriptive study of school library media centers that belonged to at least one multistate, multitype library

network in order to explore how networks impacted on collections and technical services. Only full-time library media specialists at the building level were to be involved in the study. A group of 159 full-time library media specialists who were involved in networking activities at the building level formed the basis for the study. Sixty-three of the school library media specialists were in elementary schools, 38 in middle schools or junior highs, 52 in high schools, and 6 in schools serving specialized students or all grades. Fifty-two of the schools reported that they participated in centralized resource sharing efforts including coordinated collection development. One hundred and twenty of the respondents participated in interlibrary loan arrangements. Some of the schools had access to DIALOG and BRS ; some had CD-ROMs. Many of the library media specialists identified increased access to resources as the greatest benefit of networking. They also cited the fact that networking gave them more opportunities to interact with other media specialists and alleviated the feeling of isolation. Furthermore, according to these library media specialists, using automated systems benefited students by preparing them for the future, and students were more enthusiastic toward using the computerized resources rather than doing a print search.

Barriers to networking, cited by Van Orden and Wilkes, included inadequate space, facilities and personnel and a lack of funding, planning, and communication as well as a lack of standardization in the areas of

automation and networking. The authors concluded there was a pattern of "haves" and "have-nots" in terms of how school districts decided to fund networking in some schools and not others. Another aspect of networking that concerned them was the fact that some schools "channeled funds from book budgets for technological expenses without consideration of the effect on the collection or the purchase or replacement of materials" (pp. 15-16). They also concluded that school library collections have a significant role to play in information networks because of the specialization of these collections that were useful to all citizens.

To avoid the lack of planning mentioned in the above study, it is helpful to look at a study by Kester (1992) which concentrated on developing a model of the stages of school system participation in library networks. School systems participating in state regional multitype networks, statewide school networks and OCLC vendor networks were sent a questionnaire. Responses from 362 school districts in 13 states were analyzed. From this analysis, Kester identified major activities that occurred in each of the three stages as the school library evolved towards networking. There were four primary areas during all three stages that followed an identifiable pattern as a school moved towards participating in a library network. They were (1) technological support, (2) financial support, (3) human support and (4) activities and applications. In terms of technological support, there was very limited use of computers and no

telephone in the library in phase I; in phase II, the library media specialist more regularly used computers and increased efforts to obtain a telephone; in phase III, the computer had become a management tool for the library and a telephone with a modem was now available. There was no financial support available in phase I for resource sharing. In phase II, requests for support for interlibrary loan and resource sharing began to appear in the proposed library budget. In phase III, costs for interlibrary loan, communications expenses and network fees were supported in the school budget. In terms of human support, in phase I, library media specialists had very limited communication with librarians from other types of libraries in the community. In phase II, local librarians met regularly to discuss cooperative projects and preliminary agreements for resource sharing were being designed. In phase III, local librarians had developed written policies concerning resource sharing. The activities and applications that appeared in phase I included an exchange of serial lists among librarians and an awareness of what other libraries had in their collections. In phase II union lists of the serials and of special collections were developed. In phase III, a CD-ROM union catalog or an online catalog was created. Librarians purchased materials for cooperative collection development. Kester concluded that the four above mentioned areas were key elements for the implementation of networking in a school library.

Epler and Tuzinski (1991) pointed out in their case study of ACCESS PENNSYLVANIA, a statewide library network/database, that resource sharing was a new idea to many schools. School administrators needed to be educated as to what it entailed. In order for a statewide or regional resource sharing system to succeed, its desired outcomes had be clearly defined and state support in terms of guidance and expertise and financial support had to be available. The school library had to be automated, using MARC records that were compatible with both the statewide database and the library management software packages. Although cost was an important factor in developing a statewide network, it could not be the determining factor in its development. "The key to an extremely cost-effective database is the number of libraries participating. The greater the number of libraries participating in the project, the cheaper the database becomes to create per library or per student" (pp.22-23). There were 427 school libraries (elementary, middle, and high school) and 211 other types of libraries in the ACCESS PENNSYLVANIA network in 1991, the cost per student was $2.41. The number of holdings that students had access to in the network was 13.7 million. Beyond the resource sharing itself, Epler and Tuzinski concluded that librarians had profited from interaction with other librarians and had become involved in cooperative collection development. Moreover, students were better prepared to deal with all types of data that they might encounter later on because of their

school experiences.

In an earlier study, Epler (1988) pointed out that maintaining collections in the school libraries to meet student needs was becoming more difficult. The Division of School Library Media Services (SLMS) for the State Library of Pennsylvania determined that access to online databases could address these needs. To participate, local educational groups had to agree to provide the necessary hardware including placing phone lines in the school libraries. They also had to permit the school librarians to participate in user meetings and training workshops. The State Library of Pennsylvania paid for training the school librarians to learn to do online searching. "A guide that provided advice on online management, a scope and sequence of student competencies and expected outcomes, and sample lesson plans" (p.45) was also published An interlibrary loan system was formed with three universities to give students access to additional periodicals. Data was gathered by the universities concerning the types of articles requested and the online costs for these searches. Along with online searching, the SLMS was also responsible for "bringing schools into the resource sharing networks" (p.43). Epler acknowledged that "resource sharing was much more difficult to achieve than integrating online searching into the school library media curriculum" (p.46). The technology chosen to develop the union catalog was CD-ROM. Proposals were requested from vendors to

meet the specifications of the SLMS staff. The state compensated the vendors for retrospective conversion and union catalog costs. Schools submitted applications that included a plan for sharing materials to join the project. Epler concluded that the cooperative effort to develop a library network must be supported by strong leadership at the state level to make it cost effective since "by providing statewide contracts, more pressure can be applied to reduce costs, provide vendor continuity, and maintain a high level of quality control" (p.54).

In the case study of the Hawaii School Library Network Project (Nakamura, 1991), the state, through its School Library Services in the Department of Education, also triggered the creation of a school library network. Its goal was to develop a statewide union catalog "to serve as the foundation for resource sharing among the two hundred public schools of Hawaii and for automation efforts of individual schools"(p.24). Three major methods were used for the retrospective conversion of the school library holdings. They were in-house, full data entry; in-house, partial data entry; and full vendor contract. Nakamura concluded that libraries might find a combination of these methods to be most cost-effective. Concerns that needed to be addressed before selecting a method for retrospective conversion included whether funding would be multiyear or dependent on year-to-year appropriations, what control authority would oversee the collections preventing inconsistencies, and how will the

union catalog be stored electronically. The project planners selected a CD system to produce the database for the network. After four years, the union catalog contained over ninety thousand titles and a cost-effective, high-quality database was developed capable of supporting the automation needs of Hawaii's schools.

A formal network that was not developed by a state agency, but through the efforts of a group of library media specialists, was studied by Church (1991). She examined the effect that linking sixteen rural, high school media centers in twelve counties of Virginia to an academic online public access catalog had on the students, teachers and the media center itself. This system gave students access to over 700,000 volumes from the Lancaster Library, as well as the volumes already available in the school library media center. Requests to borrow materials have increased each year since the online catalog has been in place. Church noted that "our teachers have been excited because students have access to needed information: our students have been excited because they can get what they need!" (p.2). Church conducted a survey of the participating high schools to determine the ways in which access to the online catalog had made a measurable impact on them. There was a survey for each of the media specialists and another survey for English teachers. Some of the findings from the library media specialists' survey included the fact that all of the telecommunications costs are paid by the local school system,

and students are not charged for their searches; that a majority of the library media specialists rated their administrators' attitudes towards the online access as favorable; and that online access did not increase the circulation of the library media center's own collection. Church concluded from the English teacher survey that the number of research assignments did not increase, but more varied research topics were assigned because the teachers felt that because of access to the online catalog, students would be able to find the information needed. Teachers' attitudes towards the library media center improved, and they rated the library media center more favorably in terms of adequacy of the collection.

Besides using telecommunications for accessing other collections, Swisher, Spitzer, Spriestersbach, Markus and Burris (1991) supported the use of telecommunications rather than CD-ROM when timeliness of information was a factor since CD-ROMs are updated on a monthly or quarterly basis whereas many online databases are updated daily or even hourly. They also identified telefacsimile (or fax) technology as the method most often used to forward interlibrary loan requests and to send copies of requested materials. They concluded that "whether telecommunications technology is used to access online databases or remotely held CD-ROM databases or to forward ILL requests, such technology improves access to information for users of all types of libraries, including school library media centers" (p.156).

Telecommunications through electronic mail or bulletin board services also provided school library media specialists with an effective means to communicate with one another.

All of the previous studies described formal library networks involving multitype libraries. The following studies deal with informal networking including only school libraries within a school district, school system, or within a single school. In a recent study by Manczuk and Pasco (1994), an overview of the issues and concerns that library media specialists needed to consider when developing a technology plan that would include public access catalogs and local CD-ROM networks was presented. The authors stipulated that the library media specialist had to be directly involved in the selection and purchase of the software and hardware for the library media center because "technical systems that are imposed upon the staff rather than selected by staff are often the center of serious day-to-day problems" (p.200). The placement of the hardware systems within the facility also had to be carefully planned. Manczuk and Pasco emphasized that it was necessary to project several years in advance in terms of such things as the number of terminals for patron use. The library media specialist also needed to develop a plan for the use of CD-ROMs which could either be networked or set up on a single station. The West Windsor-Plainsboro Middle School in New Jersey was presented as an automation case study. Planning for the media center

began a year before the new school was to open. The library media specialist met with the architectural firm on the technological layout. Over a six year period, new technologies were added including the capacity to link the district's six schools together. The authors concluded that,

> public access catalogs and CD-ROM networks are but two examples of tools for the future. If today's students are to be successful in tomorrow's technological world, school library media specialists must provide users with learning and information environments that promote the skills essential for the creation of informed and productive citizens (p.206)

Miller and Shontz (1994) examined and evaluated the data from a survey that included information on new technologies available in school library media centers (LMCs). They identified some characteristics of high-tech school library media centers. A high-tech library media center was defined as a library media center that had installed an online public access catalog (OPAC) and an automated circulation system. The survey showed that high tech LMCs had three times as many micros as non-high-tech schools, that three quarters of high-tech LMCs used CD-ROM technology, that 13% of the high-tech LMCs did not have telephones and 36% of traditional LMCs did not, that high-tech schools spent $3 on technology resources for every $1 spent by traditional schools and in both high-tech and traditional LMCs, the cost of microcomputer hardware depleted most of the funds available for technology resources. They also determined that print collections had deteriorated in many LMCs because

the funds had been diverted to purchase new technologies although some schools "have been able to keep up with the latest technology and have healthy print collections,...too many schools are either technology-poor, print-poor, or both"...(p.24).

The Thomas Jefferson High School for Science and Technology Library Media Center in Fairfax County, Virginia would be considered a high-tech school as described in the above study. Bard (1993) explained the process for developing a CD-ROM network in this high school in order to create a state-of-the-art research facility. The school was involved in a seven-million dollar renovation in 1987 which included modernizing the library. There was funding available to purchase six computer workstations for a local area network (LAN), to set up an online catalog and automated circulation system in the main reading area, and three computer workstations in the reference area for DIALOG searching. CD-ROM networking had not been included in the plans at this time because it was considered a very new, somewhat unknown, technology. Some standalone CD-ROM programs such as Newsbank were introduced. They were immediately very well-received by the students who preferred to use them rather than the paper periodical indexes because they were so user friendly and efficient. Students were given formal instruction to familiarize them with this new technology. The standalone CD-ROM stations were not able to handle the increasing student access demands.

To make it possible for several students to access a variety of CDs at the same time, a network needed to be installed. The school administration provided the funding (approximately $21,000) and the vision to implement this network. As Bard observed, networking required a large initial investment. The problems encountered, after the network was installed, involved technical management of the system and the fact that the faculty adapted less easily to using the new technology than the students had. She cautioned that a well-thought-out plan for implementation was necessary and technical support, preferably at the building level, was also essential. In spite of this expense, Bard gave the following reasons for networking: "increased numbers of students accessing both library holdings and CD databases; better security and less handling of CD-ROM discs; and the cost effectiveness because hardware and software costs were ultimately reduced by sharing information on CD-ROM discs" (p.187). She concluded that the overall impact of CD-ROM and LAN networks had been positive. They had increased research capabilities and expanded the possibilities for resource sharing with other schools.

Another successful implementation of CD-ROM technology at the Brunswick Senior High School in Lawrenceville, Virginia was analyzed by Cheely (1993). The high school was described as a small, rural school with 520 students of whom 75% were African-American . Over 76% of the student body was considered "at-risk". County educators made a

commitment to incorporate new technology into the curriculum. A CD-ROM network was selected. All of the existing computers in the school were linked, and new computers were purchased totaling 165 computers. Some of the advice that Cheely offered from this experience included that:

*there is a need for technical expertise either in-house or from a reliable vendor.

*most CD-ROMs run on a network but not all are multiuser. Be sure to ask if a product is multiuser and networkable.

*CD-ROM products are often more expensive if they are on on a network requiring a multiple user license.

*Plan for recurring costs since CD-ROMs are available on a subscription basis.

*Provide standalone access to CD-ROMs, as well as networked access.

*There must be continuous technology training for all users especially the faculty.

*Communicate with other library media specialists who have been involved in CD-ROM technology to share information.

According to Cheely, one positive result that has been partially attributed to the technology project has been an average 5 point rise in standardized test scores.

Mendrinos (1992, Information Searcher) also supported the use of CD-ROM technology in secondary school libraries. In her study of 379 library media specialists in Pennsylvania and Maine, she found that 80 % of them were using CD-ROM for reference. The major problem for those who were not using it was a lack of funding. She also found that "higher

socioeconomic districts averaged three CD-ROM laser discs as compared with two for the below average ones and two CD-ROM workstations as compared with 1.5 CD-ROM workstations for the lower socioeconomic levels"(p.17). Mendrinos observed that these disparities in access to this new technology must not be allowed to increase. She cited the popularity and frequency of use of CD-ROMs including the fact that "the use of the CD-ROM technology for reference by special needs, learning disabled and average students was increasing library use, interest and productivity by this population of previously infrequent users" (p.18). Mendrinos also emphasized the effect that teaching students to use CD-ROMs for reference had on critical thinking skills. In a related report (1992 October), she explained that students found more relevant material more quickly than with traditional print searches. This motivated them to use more sources and to search for connections which encouraged divergent thinking rather than a more linear, traditional approach. Mendrinos found that library media specialists preferred CD-ROM to online databases for reference because "it does not require additional staff, provides unlimited access with predictable costs, and utilizes the same thinking and learning strategies to access and retrieve information" (p.31).

Aaron (1990) has also addressed the importance of CD-ROM, as well as other new technologies in providing greater educational opportunities for students. Her study emphasized the link between collection development,

new technologies, and the concept of global education that stresses the interconnectedness of people through of the world. She observed that students need to have access to information beyond the school library media collection, including access to CD-ROM and online databases and other materials from international organizations and other nations to develop a less ethnocentric attitude toward other cultures. The traditional view that a library collection consisted uniquely of those resources and materials that were owned by the library media center has been replaced by the view that information accessed through electronic sources to information must also be perceived as a part of the library collection. Ownership of materials is only one of the ways to provide access to information. Aaron cited as an example a program of cooperative collection development implemented by the library media specialists in Hillsborough County, Florida. Each school purchased a fax machine and faxed needed materials to the other schools in the district. Students often received these materials as rapidly as if they had been housed in their school. Aaron advised that strategies for keeping current with the ever changing technologies and strategies to improve the relevance and quality of electronically accessible information sources needed to be developed so that the changes in how information is accessed can be effectively implemented to meet user needs.

Conclusion

In the studies reviewed, the authors discussed the components needed and the problems encountered when implementing library networking and resource sharing that involved school library media centers at the national, state and local levels. They all stressed the importance of careful, thorough planning and Kester (1992), in particular, offered a model of the three stages of planning for developing library networking. The NCLIS report (1978) emphasized those agencies and organizations that would be available to support the library media centers in this undertaking. Manczuk and Pasco (1994) emphasized that library media specialists had to be directly involved in the decisions concerning the selection of the hardware and software as well as its placement within the facility.

Another key element to networking in all of the studies was adequate funding. The consequences of inadequate funding were addressed by Miller and Shontz (1994), Van Orden & Wilkes (1993), the Massachusetts Board of Library Commissioners (1993) and Mendrinos (1992), who voiced concern about a pattern of "haves" and "have-nots" in terms of access to resource sharing and new technologies. It was pointed out by Van Orden (1993) that those schools that did not receive adequate funding were forced to do without or to use the book budgets for technological expenses. Miller (1994) found that this diverting of book funds had led to a deterioration of

the print collections. In terms of the cost-effectiveness of networking, Sive (1982) felt that the data available was inconclusive about the costs involved in networking. However, Epler (1991) concluded that it became increasingly cost-effective as the number of libraries participating increased and that statewide contracts further helped to reduce the cost (Epler, 1988). Nakamura (1991) and the MBLC (1993) also supported the cost-effectiveness of statewide participation. In the development of an informal CD-ROM network, Bard (1993) emphasized that although the initial investment in networking was substantial, she found that it was, nevertheless, cost-effective since the hardware and software costs were ultimately reduced by sharing the CD-ROM discs.

Another significant impact in formal and informal networking and resource sharing that was cited in the studies was the establishment of better channels of communications among librarians through networking. The NCLIS report (1978), Sive (1982), and Van Orden and Wilkes (1993) portrayed it as a decreased sense of isolation. Kester (1992) described its evolution from minimal communications in stage I to formal written policies in stage III, including agreements concerning cooperative collection development. Swisher, Spitzer, Spriestersbach, Markus, and Burris (1991) found that telecommunications also enabled library media specialists to effectively communicate with each other. However, the continued lack of availability of telephones in library media centers, as

pointed out in the studies by Epler (1988), Sive (1982), Kester (1992), and Miller and Shontz (1994), is still an unresolved issue in many school library media centers.

As communications on a human and electronic level improve, one aspect of resource sharing that should be addressed is the possibility of cooperative collection development, as described in the studies of Van Orden and Wilkes (1993) Epler and Tuzinski (1991), Aaron (1990) and Sive (1982), who recommended that it be considered as a component of resource sharing agreements. Van Orden and Wilkes (1993) and Sive (1982) further emphasized the value of school library collections to other types of libraries because of their specialized collections that would be useful to all citizens and proposed that school libraries be open to the public.

The primary technologies discussed for networking and resource sharing involved CD-ROM and telecommunications. Swisher et al (1991) supported the use of telecommunications rather than CD-ROM when timeliness of the information was a critical concern since online databases were updated more often. However, Mendrinos (1992) emphasized that CD-ROM provided unlimited access with predetermined costs. Regardless of which technologies were chosen, all of the studies underscored the importance of continuous training of library staff, administrators, teachers, and students in the use of these new

technologies. Cheely (1993) and Bard (1993) also stressed that technological expertise whether in-house or from a reliable vendor was indispensable in dealing with networking.

Although all of the other factors previously identified concerning networking and resource sharing are notable, the most significant conclusion that can be supported by all of these studies is the fact that increased access to resources is the greatest benefit of all from networking. As Sive (1982), Epler (1988), and Aaron (1990) explained, the needs of users go beyond the resources of individual school libraries. Church (1991) pointed out that the attitude toward the adequacy of the library collection improved among English teachers due to networking. Epler (1991) and Manczuk and Pasco (1994) stressed that students needed to access information in these various formats to prepare them for the future. According to Van Orden and Wilkes (1993), Bard (1993), Cheely (1993), and Mendrinos (1992), students preferred using computerized resources rather than doing print searches.

As can be seen in all of the reviewed studies, developing formal and informal networks and resource sharing capabilities for school library media centers requires planning, communication, funding, technological expertise, and a commitment to improving access to information within and beyond the school-house walls to meet the needs of library users.

CHAPTER IV

Project Design

The rationale for networking school library media centers includes the following, as documented in reviewing the literature:

> *that the greatest benefit from networking is the fact that it increases access to resources; (Swisher et al., 1991; Epler, 1988, NCLIS,1978) ;*
>
> *that the needs of users go beyond the resources of individual school libraries (Sive, 1982; Epler, 1988; Aaron, 1990);*
>
> *that students need access to information using various formats to prepare them for the future (Epler, 1991; Manczuk & Pasco, 1994;*

Using these key points, the author who is presently the Supervising Librarian K - 8 in the Taunton Public Schools realized that it was necessary to develop a strategic plan for networking the kindergarten to grade eight library media centers in order to provide students and educators with increased access to information through resource sharing and new technologies.

At the present time, technological readiness to meet the needs of the school library media center users varies considerably from school to school. In fact, some school library media centers have no technology available to their users. This has occurred because the systemwide library budget for new technologies has been cut every year, while the funding for

print materials has increased or remained constant. This has led to a print-rich environment in all of the K - 8 library media centers, but a technology-poor environment in many of these same library media centers. Those schools that have gained access to the new technologies have done so through small grants written and applied for by the author or through individual School Council funding. As Marilyn Miller noted in School Library Journal (April,1994), "Too many schools are either technology poor, print-poor, or both: The most recent survey provides proof that we definitely have some learners who are information haves and others who are information have-nots"(p.24). Of the ten school library media centers (SLMCs) in the Taunton Public Schools that serve children in grades K - 4, only four of the SLMCs have any new technologies. The four SLMCs serving students in grades 5-8 are more fortunate. Each of these SLMCs have a Public Access Catalog (PAC) containing a CD-ROM union catalog. However, they do not have automated circulation systems to fully automate these SLMCs. Along with the PACs, middle school students have access to other CD-ROMs on standalone computers.

To provide students and educators with a more equitable and improved access to resources, the author has identified the following systemwide goals for the K - 8 SLMCs:

(1) To fully automate all of the K - 8 SLMCs with networking capabilities so that students will have access to materials in every school through an interlibrary loan system and, therefore, enjoy a much richer print and nonprint environment.

(2) To ensure increased access to CD-ROM resources and other new technologies in both a network and standalone format.

(3) To provide access to the Internet so that students become knowledgeable concerning telecommunications.

These goals have been included in the draft of the Taunton Public School System's Two Year (96-97) Goals (see Appendix B). Recommendations to meet these goals have been incorporated into the four areas identified in a study by Diane Kester entitled Modeling the School System Adoption Process for Library Networking (1992). These four areas are technological support, financial support, human support, and activities and applications.

Regarding technological support, the author has participated in designing and writing the technology plan for the Taunton Public Schools since January 1995. A systemwide staff survey and interviews with representatives of the support staff, educators, and administrators indicated a need and interest in greater access to new technologies. In the survey, over 50% showed a high interest in utilizing an electronic card catalog and the internet. Access to and training in the use of CD-ROM technology was also a high priority. The results of a student survey also indicated that fewer than 5% of the respondents have access to the internet in school and only 17% have this access at home. Furthermore, less than half of the students are using the new technologies for research

and reports (see Appendix C).

Using this information, the Supervising Librarian K-8 recommended the following specific technological undertakings in the first year (1996-97):

> *Fully automating the middle school library media centers and providing them with dial-up access to a new union catalog.*
>
> *Telephones in all of the school library media centers.*
>
> *Internet access in all of the school library media centers.*

The computers used for internet access may also provide students with the opportunity to use CD-ROM technology. Even if these are standalone computers, a commitment to developing local area networks within the schools is also included in the technology plan. This will eventually lead to networking the computers within the library. Depending on the funding available for wiring and retrofiting the various schools, connecting the classrooms in a school to the library media center is a long-rang goal that the technology committee supports. Meanwhile, standalone computers with CD-ROMs will allow students at both the elementary and middle school levels the opportunities to learn to use this technology. The preference of students to use CD-ROMs when the print reference work is also available (Mendrinos, Information Searcher, 1992) further underscores the need for this technology in the SLMCs since providing

quality service and meeting users' needs is a primary function of libraries. As the demand for access to CD-ROMs increases, the decision to install a network will need to be addressed (Bard, 1993). It is important that the technology team continues to envision and plan for highly networked environments, but it is equally important that students and staff are provided with access to CD-ROM technology now even if it needs to be on standalone computers.

By developing a union catalog with dial-up access, students and staff will eventually be able to borrow materials from any of the K-8 library media centers. Instead of having a collection of several thousand materials in one school from which to choose, the students and staff will have access to approximately 100,000 materials. Fully automating the library media centers will also prepare these facilities for possibly participating in the MBLC's strategic plan which, according to its fact sheet (see Appendix D) entitled The Strategic Plan Legislation and School Libraries:

* "would allow every public and private school library to provide improved services by joining a regional library system...

* would provide every student and teacher with access to the vast holdings of over 2,000 libraries within the Commonwealth...

* would provide every student and teacher with access to thousands of references databases, electronic indexes, millions of electronic documents...

* would complement not duplicate other educational computing efforts such as MassEd Online..."

The installation of telephones in all of the school library media centers and e-mail access will be important first steps towards exploring telecommunications possibilities, especially in terms of library management and access to the internet.

To support the above determined technological goals for the SLMC's as outlined in the technology plan (see Appendix E), the author and the other technology committee members will propose a specific first-year budget to begin the implementation with recommendations for ongoing funding throughout the five-year process. Kester (1992) in her model emphasizes the need to ensure that funding to support resource sharing and interlibrary loan is included in proposed budgets. Furthermore, it is vital that "communication expenses and network fees are supported by the school system budget." (Kester, p. 9). Since a zero-base budgeting process is used in the Taunton Public Schools, estimated amounts were proposed by the Supervising Librarian K-8 in the library budget for 1996-97, to begin to implement the proposals of the technology committee.

Automating the school library media centers, installing telephones, and computers with modems and CD-ROM capabilities, will have a substantive effect on the library staff. Kester (1992) discusses both informal and formal cooperation and communication. In the Taunton Public

Schools, two aspects of informal cooperation and communication will continue simultaneously. The K-8 library staff will regularly meet with the Supervising Librarian K-8 to discuss the implications of the systemwide technology plan for the SLMCs. The staff will be encouraged to share their expertise concerning the new technologies with each other. Additional workshops will be provided by the author to ensure that the K-8 library staff has the skills and knowledge to use the new technologies and to share their knowledge with the students and staff. The author will continue to attend the SOBL (South of Boston) pre-planning committee meetings whose mission is "the identification and education of potential members and the assessment of their needs for regional library services, to insure the development of a multitype library region" (see Appendix F).

In March 1996, the author, who was awarded a scholarship from TCI Cablevision, will spend three days at the J. C. Sparkman Center for Educational Technology in Denver, Colorado

> to gain hands-on experience with a variety of instructional technologies, including cable-delivered video and data resources, Internet, information retrieval, Cable in the Classroom programs, and video and computer networks as well as multimedia and electronic publishing." (see Appendix G)

This learning experience should help the author to provide greater support and understanding during the implementation process for the new technologies in the SLMCs and throughout the school system.

The installation of telephones and e-mail capabilities will encourage

the library staff to communicate more effectively with one another; and, therefore, decrease the sense of isolation which is a common problem in standalone libraries (NCLIS, 1978; Sive, 1982; Van Orden & Wilkes, 1993).

The fourth area that is identified by Kester (1992) concerns activities and applications, in other words, "evidence of sharing"(p.7). The library staff has already experienced some aspects of sharing. This has been established in the areas of centralized cataloging and ordering. There have also been discussions about the possibilities of cooperative collection development in terms of developing special collections in particular schools that could be shared by the other schools as needed rather than duplicating materials that only have occasional or limited use.

Technical services involved in automating the SLMCs will be centralized as much as possible by the Supervising Librarian K-8 so that the SLMC staff in the individual schools can concentrate on helping the students and staff access information and find the materials they need.

Developing a union list of the periodicals in all of the SLMCs will be considered, along with the possible future use of fax machines to transfer requested journal articles (Swisher et al., 1991). An analysis of the cost involved in this type of resource sharing, as well as a written policy covering acceptable use in terms of copyright laws, will have to be done before offering this service to SLMC users.

This plan for networking and resource sharing in the SLMCs of the

Taunton Public Schools incorporates four essential areas that "research supports...are important to a school becoming a participating member of library networking" (Kester, p.10). Furthermore, by actively participating in the systemwide technology planning process, the Supervising Librarian K-8 has been able to identify, clarify, and advocate for the vital role that SLMCs can play in implementing this plan since successful examples of library networking, enabling users to access new technologies, can be seen in all types of libraries.

CHAPTER V
Results

The implementation of the three systemwide goals, recommended by the author for the K-8 school library media centers, will officially begin during the 1996-97 school year with the adoption of the systemwide technology plan. During the 1995-96 school year, steps are being taken to prepare for the district-wide library automation plan, as well as to provide increased access to CD-ROM technology and the internet.

In terms of fully automating the school library media centers, an automation system has to be selected. The process for choosing this system involves defining the capabilities that our school system wants to have incorporated into its SLMC automation system. Key elements that have been identified include an online catalog, circulation, checkout, inventory, and inter-library loan. There will be a union catalog in a centralized location that will be able to be searched through dial-up access until the technology plan's envisioned wide area network is developed. The software for this system will be selected first. An informal group including SLMC staff members and members of the technology committee will participate in the selection process. This will involve contacting vendors and viewing their products through demo disks and/or demonstrations by the vendors. There will be site visits to SLMCs that are using the various systems. The latest articles on specific

automation systems from professional publications such as Media & Methods, Technology Connection, and School Library Journal are being compiled and consulted. Anecdotal information that is available through LM_Net has also been sought and downloaded. All of the information that is being gathered will help to clarify the specifications to be written into the request for proposals (RFP). The purpose of all of these steps is to ensure that the system that is chosen will provide flexibility, especially in terms of growth, and connectivity. This will enable the schools within the district to share their collections and to eventually be able to participate in the statewide network configurations being proposed by the Massachusetts Board of Library Commissioners. Because all of the records of the four middle school SLMCs are already available in MARC format, any system that is chosen to fully automate these SLMCs must be able to adapt these records to their system in a cost-effective way. This will be one of the criteria that vendors will have to address in the RFP. The costs for support, upgrades, new software, and equipment also need to be clearly identified by the vendors since these will be ongoing expenses that the school system will have to bear.

After the automation software has been selected, hardware requirements will be determined in consultation with the school system's technology specialists. It is important to keep in mind that the system will continue to grow as new materials and schools are added. Therefore,

the hardware needs to be able to accommodate this growth in terms of both the size of the collections and networkability.

The technology plan proposes that each middle school library facility will have dial-up access to the union catalog. Whether this goal is completely met in 1996-97 will depend upon the amount of funding made available to support the technology initiatives and goals. However, work on the new union catalog will begin, and at least one middle school SLMC will begin the process of becoming fully automated. This SLMC can then be used as a model by providing insights into the real time needed to complete the process, the amount of staff training needed, and unforeseen difficulties. These issues can then be addressed ahead of time as the other SLMCs begin to automate.

As the SLMCs are fully automated, telephones will need to be installed. Although the middle school SLMCs presently each have a single phone line, it is obvious that at least one additional line will have to be installed since both the technology plan and this library networking plan require telephone lines for multiple purposes. The automation system will need a line for dial-up access to the union catalog. The phones that were installed in the spring of 1995 have already improved communication among the staff of the four middle school SLMCs in terms of exchanging ideas and information in a more timely fashion. They have also facilitated their contact with the Supervising Librarian K - 8 since they

no longer have to leave the SLMCs and go to the principal's office or teachers' room to contact her about SLMC concerns. They have lessened the sense of isolation among librarians since the process of contacting other libraries, book jobbers concerning orders, or any other library activities can now be done on site. Increased communication, even on a very informal level, helps to prepare the staff for even greater communication efforts through the e-mail connection that the technology plan has proposed for all of the SLMCs in 1996-97. Workshops will be offered to all of the areas that have been selected to have e-mail capabilities in 1996-97. These areas include the administrative offices, computer labs, guidance offices and the SLMCs. Through Mass Ed OnLine (MEOL) accounts, the library staff will also begin to have access to the internet. Training sessions on internet use will be provided. Opportunities to attend workshops given by MEOL will also be made available to the staff.

As e-mail capabilities and the automation system begin to be implemented, increased access to CD-ROM technology must also be taken into account. Since there are presently no local area networks in any of the elementary and middle schools, standalone computers will offer students access to this technology while plans for LANs are undertaken. Those SLMCs that already have CD-ROMs available need to upgrade and increase the number of computers. Those SLMCs without CD-ROM

technology need to make this available to students and staff as soon as possible. Both the Strategic Plan for the Future of Library Services in Massachusetts (1993) and Mendrinos (1992) emphasized the need for equitable access to new technologies to avoid creating a pattern of "haves" and "have-nots". The systemwide technology plan has also emphasized the importance of equitable access to new technologies. Since the SLMCs are used by all of the staff and students in each school, placing these technologies in the SLMC certainly helps to address the equity issue throughout the school system. CD-ROM networking within the SLMCs has been discussed by the technology committee and will eventually become a reality. However, as Nancy Bard commented in her article on Networking CD-ROMs: A Case Study (1993), it requires "vision, planning, funding, stamina, and a sense of humor" (p.185). She also noted that "the need for networking became apparent when we were unable to meet the demands of the students" (p.186). Through the SLMC plan and the technology plan, recognition concerning the need to network will be addressed.

The acknowledgment that standalone CD-ROM stations, and more significantly standalone SLMCs, would have increasing difficulties meeting the needs of the students and staff necessitated the development of a systemwide plan for networking the SLMCs and increasing access to new technologies. The opportunity to integrate aspects of the SLMC plan into the technology plan reinforces the potential for implementing the

school library media center proposals since the school system will officially approve and fund the technology plan. This plan will also be submitted to the Massachusetts Department of Education so that the school system will be eligible for technology funding.

As this plan for networking the school library media centers begins to be implemented in the 1996-97 school year, its progress will be evaluated in several ways. The Supervising Librarian K-8 will continue to consult Kester's study (1992) and use the three phases and four areas influencing networking and resource sharing (technology, funding, and human support, and activities and applications) as guidelines to continue towards improved and more equitable access to information and resources throughout the school system. "It is noted that events in each phase will differ depending on local support, and that movement will be a gradual transition as schools move into a shared resources environment" (Kester, Document Resume, Abstract).

The systemwide technology plan must establish a process to monitor and evaluate the plan's implementation along with a process for ongoing revisions using the information from the evaluations. Aspects of the plan that concern the SLMCs will, therefore, be a part of this process.

As the automation systems are introduced, statistical information on usage will be gathered. Discussions with the library staff at meetings and on-site visits on the utilization of new technologies will also be an

ongoing activity. Thus, both anecdotal and statistical information will be gathered and evaluated. This information will help to formulate future SLMC proposals and plans for providing students and staff with access to needed information and resources in the electronic age.

CHAPTER VI
Discussions, Conclusions, and Recommendations

This plan for networking the school library media centers, which involves fully automating the SLMCs and providing CD-ROM and internet access, was designed with the purpose of trying to meet the informational needs of the students and staff more effectively. Through ongoing participation on the technology planning committee, the author has been able to gain support for integrating specific aspects of this SLMC networking plan into the systemwide technology goals and initiatives. The inclusion in the technology plan of a commitment to begin to fully automate the SLMCs and provide a networking component through dial-up access to a union catalog is a significant first step. Eventually, automation of the SLMCs will give students the opportunity to borrow materials in any of the K - 8 SLMCs within the school system. In terms of print materials alone, this would include at least 100,000 print materials that could be shared throughout the system.

As the systemwide automation system is implemented in all of the K-8 SLMCs, cooperative collection development strategies and policies will be discussed and formulated by the SLMCs staff (Kester, 1992). This would include stressing certain curricular strengths at various schools. For example, a comprehensive collection of materials on the rain forest

might be developed in one SLMC that could be used by another school as needed, rather than duplicating all of the same materials in several schools. The development of a union list of periodicals may also be considered to make the staff and students aware of the periodicals available in each school so that particular issues could be borrowed or articlesthat are needed copied in compliance with copyright laws governing this practice. Information on the amount of usage of various periodicals could be kept and evaluated by the library staff and decisions made concerning the duplication of subscriptions and expansion of the collection. Through a cooperative collection development approach, students and staff would have access to materials beyond the walls of a single standalone library. Access to materials through networking, rather than ownership of materials within one facility, would enhance users' opportunities to fulfill their informational needs. It has been pointed out standalone libraries cannot meet the needs of their users and should move towards cooperation and networking to improve the quality of the services they offer (MBLC, 1993, Aaron, 1990).

The significance of this automation process cannot be overemphasized. It holds the key to linking the SLMCs not only to each other, but to multitype libraries when the Massachusetts Board of Library Commissioners begins to implement its strategic plan for a statewide, multitype library network. Participation in this project will create an

enriched learning environment within the school system. As stated in a Fact Sheet on the plan,

> "For the first time, students could have full access to the resources of their local public library from their school library and vice versa. The legislation would also provide a means for improving coordination among all libraries with each community... allowing each to offer better service and allowing more effective use of limited local resources." (see Appendix H.)

The sharing of resources that results from networking is only one of aspect of this concept of connectivity. Another is the human connectivity that occurs among the SLMC personnel as they become involved in this process. Increased capabilities of communication among the staff of the SLMCs, through e-mail and regular telephone access, will encourage them to provide better and more timely service to their users by trying to satisfy informational needs through requests for both assistance and materials from other SLMCs. More formalized procedures for these activities may be developed as patterns of usage and concerns arise.

By making these new technologies available to students in the SLMCs, the concern about equitable access begins to be addressed since all students and staff have the opportunity to use this facility in their school. Besides the equity issue, research supports the premise that students prefer computerized resources rather than doing print searches (Bard, 1993; Cheely, 1993; Van Orden & Wilkes, 1993; Mendrinos, 1992). They also need to develop their skills to use these electronic resources if they

are going to be able to effectively find and use information. Learning these skills in school will help to prepare them for the future (Epler, 1991; Manczuk & Pasco, 1994). As students access information more rapidly, they are able to spend less time searching and more time analyzing, synthesizing and evaluating the information (Mendrinos, 1992). The potential for richer and more complex learning experiences becomes realizable through the use of varied electronic formats that support different learning styles and the "explosion" of information available in these formats. (MBLC, 1993).

The successful implementation of this SLMC networking plan will require technological, human and financial support as identified by Kester (1992) and discussed in terms of this project. In conjunction with the systemwide technology plan, it will change how learning and instruction take place. Students, administrators, teachers, and support staff will have to be educated in the use of these new technologies so that the benefit of increased access to resources will be maximized by having a technology and information literate educational community.

The following recommendations would help to support the successful implementation of this project:

1. Ensure access to technological expertise whether in-house or from a vendor (Cheely, 1993; Bard, 1993) so that the complexities involved in networking do not lead to frustration.

and a lack of success in providing improved services in terms of timely and increased access to information.

2. Select software and hardware that will allow for growth and flexibility as increased networking demands arise.

3. Provide continuous training of the staff, administrators, teachers and students in the use of new technologies.

4. Educate administrators as to what is involved in networking and what its potential impact would be in contrast to the standalone facilities presently in place.

5. Promote the continued development of strong individual collections of print and nonprint materials so that the proposed network will have not only an increased amounts of materials available, but quality materials for resource sharing.

6. Monitor the ongoing development of the systemwide technology plan by participating on the committee and using the networking strategies that must be included in this plan to help to define the role and goals of the SLMCs in this project.

7. Continue to participate in the SOBL (South of Boston Libraries) Pre-planning Group as they lay the groundwork for participation in a multitype network plan developed by the

Massachusetts Board of Library Commissioners.

8. Establish regular meetings of the staff of the SLMCs to discuss the progress, problems, policies and procedures as the new technologies and networking are introduced.

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MASSACHUSETTS BOARD OF LIBRARY COMMISSIONERS

1995/1996 LEGISLATION

H.4381

AN ACT IMPLEMENTING THE STRATEGIC PLAN TO ENHANCE LIBRARY TECHNOLOGY AND RESOURCE SHARING IN THE COMMONWEALTH

FACT SHEET

Millions of residents in the Commonwealth depend on libraries for the information they need to achieve personal and economic potential. Today, this basic access to information is threatened by the challenge of new information technologies and by barriers which prevent full cooperation among libraries of all types.

"An Act Implementing the Strategic Plan to Enhance Library Technology and Resource Sharing in the Commonwealth" filed by Representative David Cohen of Newton for the 1995/1996 legislative session will:

- expand the present Regional Public Library Systems to include membership from academic, school and special libraries in the Commonwealth. This will provide users of all types of libraries with expanded access to books and other library materials available within each region, regional reference and delivery services and other cooperative services designed to strengthen local libraries,

- establish statewide programs to provide access to specialized informational resources on a statewide basis and support library resource sharing activities statewide,

- enhance the capabilities of the Massachusetts Library and Information Network (MLIN), a statewide electronic information network linking all libraries. This will provide libraries and residents with a statewide catalog of books and other materials available through participating libraries, access to state and federal government information and access to general and specialized library reference services,

- build on existing library resources and strengths.

During the last decade, Massachusetts libraries of all types have struggled to meet rising demands for service with static or declining funding. State-supported programs for resource sharing and regionalization have allowed libraries to vastly expand their ability to meet user needs, but these programs must be expanded if many residents are not to be "left behind" in the information age.

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During this same period, developments in telecommunications and computer technology and the rapid growth of electronic information have revolutionized the way people communicate, work and learn. These new information technologies present a costly challenge; a challenge which libraries must meet if the Commonwealth's residents are to have access to the information that they will need to compete in today's national and global economy.

The Commonwealth must take a strong leadership role if libraries are to provide people with access to these new information sources and to allow libraries of all types to work together effectively. Individual communities do not possess the resources nor are they positioned to create the statewide network which is needed to link libraries, new electronic information sources, and users. Only the Commonwealth can create this network.

In 1993, the Board of Library Commissioners, the State Agency responsible for the maintenance and improvement of library services in the Commonwealth, adopted a *Strategic Plan for the Future of Library Services in Massachusetts*. This plan has now been filed for the 1995 legislative session as "An Act Implementing the Strategic Plan to Enhance Library Technology and Resource Sharing in the Commonwealth."

To meet expenditures necessary to carry out the provisions of this legislation, the Massachusetts Board of Library Commissioners is requesting the following funding increases:

LINE ITEM ACCOUNT	TITLE	FY1996 FUNDING	REQUESTED INCREASE	PROPOSED FY1997 FUNDING
7000-9101	ADMINISTRATION	$ 801,155	$ 200,000	$ 1,001,155
7000-9401	REGIONAL LIBRARY SYSTEMS AND LIBRARY OF LAST RECOURSE	$13,005,931	$3,839,446	$16,845,377
7000-9506	TELECOMMUNICATIONS/ RESOURCE SHARING	$ 477,235	$3,943,000	$ 4,420,235
TOTAL INCREASE REQUESTED			**$7,982,446**	

TAUNTON PUBLIC SCHOOLS
TWO YEAR (96-97) GOALS
DRAFT - FEB. 7, 1996

GOALS AND OBJECTIVES	DATE TO BE COMPLETED	RESPONSIBLE STAFF	SUB COMMITTEE
4 The School System's Library Program will continue to be an area of major emphasis. The mission of our library media centers is to promote independent reading programs, booktalks and other activities and to ensure equitable and timely access to needed information in various formats.	Dec. 1997	Dr. Croteau, Ms. Schene, Ms. Fraga and Principals	Elem. and/or High School Sub Committee
a. Additional staff will be employed to enhance students' opportunities to use the facilities. Our goal is to have at least (1) full time Library Asst. or Associate Librarian in every K-8 library media center.	Sept. 97	• •	• •
b. To continue to develop our print and nonprint collections in accordance with A.L.A. Guidelines.	Dec. 1997	• •	• •
c. To begin to fully automate the library media centers with networking capabilities so that students will have access to materials in other schools through in interlibrary loan system and, therefore, enjoy a much richer print and nonprint environment.	Sept. 96	• •	• •
d. To ensure increased access to CD-ROM resources and other new technologies by upgrading and adding computers and the appropriate software.	Dec. 1997	• •	• •
e. To provide access to the internet so that students become knowledgeable concerning telecommunications.	Sept.,1997	• •	• •
f. To continue to make arrangements for "Summer Hours" in those schools that request these hours. The High School library will extend the times that this facility is open to students after school hours.	June 96, 97	• •	• •

APPENDIX B

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3. CURRENT STATUS

3.1 Students and Staff Assessment of Technology Skills, Knowledge, and Attitudes

STAFF ASSESSMENT

In February of 1995, the staff survey (see Appendix ?) posed a series of seventy-three questions to administrators, educators, and support staff of the Taunton Public Schools. In addition, ten interview sessions that involved seventy-four interviewees were held in April and May. Participants answered questions dealing with their current use and expertise in the field of technology.

A major issue that was evident from both the interviews and the surveys was the staff's need for and request for technological training. Only 15% consider themselves to be advanced users of word processing while only 1 to 6% consider themselves advanced users in all other categories. Staff requested training in these important areas:

- 79% multimedia with CD-ROM
- 77% word processing and on-line communication
- 76% spreadsheets, charts and graphs
- 73% desktop publishing
- 70% database research and classroom management.

Less than half of the staff have a computer to use at work; however, 77% would use one if it were available. Of the 46% who do use the computer in their primary work assignment, the most common applications are drill and practice and word processing. Moreover, only 5 to 10% use higher-level skills such as modeling, experimentation, simulations, lesson and multimedia presentations, budgeting and scheduling.

Regarding other types of equipment:

- less than 50% of our staff use overhead projectors and listening centers

- less than 10% use fax machines, camcorders, compact disk players, teleconferencing equipment, video disk players, and voice mail.

On the other hand, staff showed a high interest in the services that rely on some of the equipment previously listed:

- more than 50% would utilize school record access, electronic card catalogue, school and professional bulletin boards, remote and internet access, and electronic distance learning.

- more than 45% valued electronic calendars, mail, and conferencing.

The most widely used equipment employed by the staff are copy machines, cassette tape players, VCRs, and calculators; however, they claim that much of the equipment is overused and often unavailable and/or broken.

Access to current software and hardware has enhanced the success of two programs. The high school CAD program won several awards at competition in 1995, and the 1994 high school literary magazine won second place in national competition. This is evidence that when equipment is available and the staff is trained, both teachers and students excel.

STUDENT ASSESSMENT

In May of 1995, a student survey was conducted to assess technology skills, knowledge and attitudes. Students were surveyed on the fourth, eighth and eleventh grade levels regarding their use of computers and audio visual technologies both in school and at home.

- *School Computer*
  Of the students surveyed on all levels, 97% have access to computers in school; however, only 34% can use them in their classrooms. Of the more than 1,100 students responding, only 8% use computers on a daily basis. Located in labs, the majority of these machines are older Apple or Macintosh models which lack modern peripherals such as modems and CD-ROMs. As a result, fewer than half of our students are using the compute for research and reports, while most are using it for word

processing and drill and practice games. Fewer than 5% have access to electronic mail and the Internet.

◊ *Home Computer*
When asked about computer use in their homes, 57% reported that they do not have access to one. Of these students who do have a home computer, most use them several times a week for games and word processing of homework and reports. Fewer than 17% use their computer for electronic mail. Internet access and musical composition.

◊ *Audio Visual Equipment*
Regarding audio visual use in the classroom, students indicate that their teachers regularly use common equipment such as the VCR, tape recorder, and overhead projectors on a weekly or monthly basis. On the othe hand, more modern equipment such as the compact disk player, camcorder and laser disk are almost never used. Students themselves report that they know how to use the VCR, compact disk player, camcorder, tape recorder, and answering machine but not the laser disk and fax machine.

MASSACHUSETTS BOARD OF LIBRARY COMMISSIONERS

THE STRATEGIC PLAN LEGISLATION AND SCHOOL LIBRARIES

FACT SHEET

Throughout the Commonwealth, libraries are struggling to meet the increasing demands of an information age. New technologies, new forms of information and an emerging global economy are placing demands on our current library infrastructure which are beyond the financial capacity of most local municipalities.

The Board of Library Commissioners has submitted to the General Court a major legislative proposal, House Bill 4381, which will establish a new structure for library and information services for the coming decades. The bill is based on *A Strategic Plan for the Future of Library Services in Massachusetts* developed by the library community and adopted by the Board of Library Commissioners in July of 1993.

This legislation would guarantee every resident of the Commonwealth basic access to library materials throughout the state and to a broad range of electronic information services, regardless of geographic location or community wealth. It does so through statutory changes which will modify the existing structure for regional and electronic networking services and through an increased annual appropriation of $7.9 million dollars to make an expanded range of services available to every library user.

If implemented, the legislation would:

- open the present Regional Public Library Systems to participation by academic, school and special libraries in the Commonwealth, dramatically increasing access to the collections and services of these libraries.
- establish programs to provide access to specialized informational resources on a statewide basis and support library resource sharing activities among the Commonwealth's 2,500 libraries.
- enhance the capabilities of the Massachusetts Library and Information Network (MLIN), a statewide electronic information network linking all libraries, increasing state support for the ten automated networks which currently serve over 300 Massachusetts libraries.

The legislation would eliminate many of the gross inequities which currently exist in library services throughout the Commonwealth and save municipalities many millions of dollars over the coming years by allowing them to offer critical library services they would otherwise be unable to afford.

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WHAT WOULD THE PROPOSED LEGISLATION MEAN FOR YOUR SCHOOL?

- a student working on a research project in the school library could use a terminal to search and locate information from hundreds of sources, then download and print the articles they need.

- a student in a school library looking for books on a topic could search catalogs throughout the Commonwealth, including the local public library and public, academic and school libraries in neighboring towns.

- a student working on a project could use their home computer to dial into library information sources—even when the library is closed.

The strategic plan legislation would allow every public and private school library to provide improved services by joining a regional library system. Three regional systems currently provide public libraries throughout the Commonwealth with backup reference service, interlibrary loan services, faxes of articles, training in the use of electronic information sources and group purchasing and licensing discounts. Under the proposed legislation, these services would also be available to participating school libraries.

By supporting cooperation and resource sharing between school libraries and local public libraries, college and university libraries and other school libraries, the legislation would provide every student and teacher with access to the vast holdings of over 2,000 libraries within the Commonwealth. Through supporting a statewide electronic library network, the legislation would also provide every student and teacher with access to thousands of reference databases, electronic indexes, and millions of electronic documents.

Electronic services which would be provided under the legislation would complement (not duplicate) other educational computing efforts such as MassEd Online and the Massachusetts Educational Computer Network, which serves institutions of higher education.

The proposed legislation would not take the place of the school library (a school must have a library with certain basic requirements to participate), but it would make the school library a gateway to the collections and resources of other libraries. The plan would not provide computers for school libraries (that is a local district responsibility), but it would allow these computers to access a wide variety of electronic library resources.

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4. PROGRAM GOALS AND TECHNOLOGY INITIATIVES IN SUPPORT OF EDUCATION REFORM

The administrative and management goals, communication and information access goals, instructional and curricular goals and the staff competency goals for the Taunton Public Schools have been designed to support both statewide education reform and the implementation of the Taunton Public School system's Vision for Education. The emphasis in these goals is on connectivity of people, places and ideas through technology. This linkage will improve the effectiveness of class instruction as well as the management of our system by promoting an easier and more timely exchange of ideas and information.

This plan delineates a process that requires everyone -- administrators, staff, students, parents and the community at large -- to become lifelong learners participating in the ongoing changes and activities that will occur as we begin to achieve these goals. There are two key components in terms of professional development -- staff training on how to use technology and commitment by the staff to use technology as an integral part of the learning environment.

4.1 Administrative and Management Goals and Initiatives

A. The district will provide the infrastructure and personnel necessary to create an environment conducive to managing the implementation of new and existing technology.

YEAR ONE - *Specific Task(s)*
♦ The district will establish the position of technology coordinator.

B. All school buildings and administrative offices will have the capacity to acquire information and perform document processing applications such as: standardization of forms, publishing, databases, and spreadsheets.

YEAR ONE - *Specific Task(s)*		
♦ The central office and each school administrative office will have a facsimile machine.		
♦ There will be e-mail capabilities in the following areas:		
Elementary Schools	Middle Schools	High School
Admin. Office	Admin. Office	Admin. Office
Library	Library	Library
Computer Lab.	Computer Lab.	Computer Labs
		(English, Tech. Ed., Math
		Math, Business, Science)
Guidance	Guidance	Guidance

C. Administrative staff will gain the necessary skills to use technology to improve administrative and management effectiveness.

YEAR ONE - *Specific Task(s)*
♦ Required training will be provided to the following staff-- administrators, clerks, librarians, computer teachers, computer assistants, and library support staff.

4.2 Communication and Information Access Goals and Initiatives

A. A network will connect all district school offices, libraries, learning centers and classrooms with local and global access.

YEAR ONE - *Specific Task(s)*
♦ The high school library will be linked to the ABLE network.
♦ Each middle school library facility will have Dial-Up access to the online union catalog.
♦ The district will establish standards and choose a uniform independent service provider.
♦ The district will formulate a plan for the step-by-step implementation (with timelines) for the establishment of a LAN in each school.

B. The district will use technology to improve communication and access among teachers, administrators, support staff, students, parents and the community at large.

YEAR ONE - *Specific Task(s)*
♦ Once a network provider is selected, communication capabilities will be available to teachers, administrators, support staff, students, parents and the community at large.

C. The district will provide training on current technology to enhance the use of the established network.

YEAR ONE - *Specific Task(s)*
♦ The district will offer communication and information access workshops in the current technology to the staff on a continuous basis.

MEMORANDUM

DATE: *******

TO: School Library Professionals

FROM: South of Boston Libraries

RE: Small Discussion Group Meeting

The South Of Boston Libraries group which held open meeting in Plymouth and Bridgewater last June has continued it's activities through the summer. We would like to bring you up to date on our activities.

At the past several meetings the group has been working on the development of a mission statement. The following was adopted during the August meeting:

> The mission of the pre-planning committee, SOBL, shall be the identification and education of potential members and the assessment of their needs for regional library services, to insure the development of a multi-type library region.

During the next couple of weeks work will be done in small groups of similar interests for the purpose of further articulating the needs of libraries of all type for services which might be provided by a proposed multi-type region. In anticipation of the small group discussions brainstorming/prioritization techniques has been developed, and a listing of accepted services definitions composed.

We are asking you to participate in a meeting to discuss (type of small group inserted here) in relation to regional services under a new state wide plan. Enclosed you will find a copy of the service definitions and some brainstorming techniques. We are asking that you take a minute or two look at these sheets, and share your ideas and comments with us at a meeting schedules for list date time location here. If you are unable to attend you can send written comments to list name and address here.

We look forward to either meeting with or hearing from all of you. Participation is the key to success in the development of new regional services.

Sincerely,

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SOBL Terms

The five definitions below represent some of the major areas of regional services that would be provided in the new multi-type region.

1. Regional Delivery Service
   Provides for physical delivery of books and other library materials, telefax, and electronic transfers among participating libraries within region.

2. Regional Supplemental Reference Service

A. Direct resident access to regional reference and research center or centers.
   Provides users with direct on-site and telephone access to supplemental reference and research services beyond those available in individual libraries and may provide users with direct electronic access to supplemental reference services beyond those available in individual libraries. Standards for supplemental reference centers will be developed by the Board of Library Commissioners in consultation with regional systems.

B. Supplemental reference service to libraries.
   Allows librarians to refer informational requests that cannot be answered using resources available within the library to a regional supplemental reference service.

3. Regional Interlibrary Loan Center or Centers
   Allows librarians to refer requests for materials not available within region through a regional interlibrary loan center. Allows librarians in libraries without electronic access to a regional bibliographic database to refer requests for materials available within region to a regional interlibrary loan center. (Ultimately, all participating libraries will be able to place interlibrary loans directly.)

4. Continuing Education and Training Programs
   Workshops, seminars, and other training activities for librarians, trustees and library staff and the development of programs of information education and training for library users.

5. Advisory and Technical Assistance Programs
   Includes telephone and technical on-site assistance for librarians, trustees, and library staff.

6. Other programs of interest to member libraries
   Development of programs/services which would originally been of interest to specific types of library but would have benefit and potential to all types.

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Brainstorming Techniques

Begin with a clear vision for the future....not a road map of how to get there. The proposed Strategic Plan is our vision for the future of library services in the Commonwealth. Look at areas of service, not specific individual service activities.

1. Look closely at what is currently in place for your type of library, ie. public, school, academic, special. Write these down.

2. Imagine what services your type of library would have in the future based on the Strategic Plan, the SOBL mission statement and service terms. Write these down.

3. As a result of the above activity select those which you feel would be of most benefit to your type of library. These should be in priority order. Please base your priorities on activities needed now in order to provide continued quality library services to your customers.

All brainstorming ideas will be complied to form a set of group priorities based upon the multitype libraries in our area.

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TCI Cablevision of North Attleboro/Taunton

October 31, 1995

Ms. Carol Schene
[redacted]

Dear Carol,

TCI Cablevision is happy to announce that you have been selected to receive a J.C. Sparkman scholarship. Congratulations from all of us at TCI Cablevision on this special honor! We're thrilled that you will be able to travel to Littleton, Colorado, to participate in learning the latest teaching technologies.

The J.C. Sparkman Center is one of the leading technology education centers in the country. During your visit, you will gain hands-on experience with a variety of instructional technologies, including cable-delivered video and data resources, Internet, information retrieval, Cable in the Classroom programs, and video and computer networks as well as multimedia and electronic publishing.

The Sparkman Center will begin notifying teachers about the dates of their training during the middle part of December, and the letter will also include flight and hotel information.

The Sparkman Center trips form just one part of the TCI Education Project which includes free-of-charge cable drops to our schools, video data services, and over 500 hours a month of commercial-free programming through Cable In The Classroom. The $2500.00 teacher scholarships are the result of funds raised during the August/September TCI Education Campaign.

Once again, congratulations on receiving this teacher scholarship! Please reach me with any questions or concerns at (508) 822-2300.

Best wishes,

Judy Bachelder

Judy Bachelder

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[redacted]
North Attleboro, MA
508 [redacted]
Fax (508) [redacted]

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MASSACHUSETTS BOARD OF LIBRARY COMMISSIONERS

THE STRATEGIC PLAN LEGISLATION AND CITY AND TOWN LIBRARIES

FACT SHEET

Throughout the Commonwealth, libraries are struggling to meet the increasing demands of an information age. New technologies, new forms of information and an emerging global economy are placing demands on our current library infrastructure which are beyond the financial capacity of most local municipalities.

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HOW WOULD THE PROPOSED LEGISLATION HELP MY CITY OR TOWN LIBRARY?

More Regional Services

The state funded regional library systems provide many important services to public libraries (currently, the regions provide over three dollars in local benefits for each state dollar invested). Regional services such as interlibrary loan, delivery, back up reference services, technical assistance, continuing education and other special supplemental services needed by members would be strengthened under the proposed new regional structure. In addition, the new structure would provide a more equitable distribution of state funding for regional services.

More State Support for Technology and Automated Networks

The high operating cost of computer technology is one of the most pressing financial issues for libraries today. Under the proposed legislation, direct state funding for the ten automated networks (which currently serve over 300 public libraries) would be increased, thereby decreasing local costs or allowing the addition of necessary services which libraries cannot presently afford. The legislation also provides for full funding for library-to-library telecommunications costs, which are expected to double during the next three years. The legislation would also provide funding for a wide variety of informational databases, electronic indexes, and millions of electronic documents, all available at no charge to local libraries and local library users.

More Support for Cooperation and Resource Sharing between Public Libraries and School Libraries within each Municipality

For the first time, students could have full access to the resources of their local public library from their school library and vice versa. The legislation would also provide a means for improving coordination among all libraries within each community (including college and university libraries and special libraries in institutions such as hospitals) allowing each to offer better service and allowing more effective use of limited local resources.

Free Access to Unique and Specialized Library Information Resources in Massachusetts

With over 2,000 libraries and over 75 million library holdings, Massachusetts may possess the greatest and most diverse information resources in the country. However, many of the most unique resources are currently inaccessible to most residents. Under the proposed legislation, residents and businesses would have expanded information services in such areas as medicine, business, technology, science and law—all through their nearest library and all at no cost to local municipalities. For the first time, even the smallest library could offer "state of the art" information services.

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